

Motivational Design in Translation Crowdsourcing: A Gamification Approach to Facebook Community Translation

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Translation crowdsourcing, an online participatory practice emerging in the Web 2.0 era, has been widely adopted by both for-profit and non-profit organizations to expand their global reach and achieve their commercial or humanitarian goals. The key to successful translation crowdsourcing lies in the ability to motivate volunteer translators. Previous studies have made a detailed inquiry into this motivational issue, mainly from the standpoint of the translators themselves. In order to offer complementary views on motivation, this paper takes Facebook community translation as the subject of a theoretical case study, and explores its motivational design based on insights drawn from gamification research. The analysis reveals that apart from having some game-like elements as its main components, Facebook's translation application also contains a three-part motivational design—consisting of motivational considerations, simplification devices and triggers—to accompany these primary components. Such an arrangement fulfills the requirements of an effective gamified system, and in principle can assist Facebook in meeting the diverse motivational needs of its user-translators and keeping them engaged. The effects of this motivational design, however, may be diminished in actual practice by (1) Facebook's inattentive and non-responsive attitude, (2) the lack of sufficient contextual information for the translation of the segments, and (3) the constrained visibility of the feedback mechanisms. In addition, some ethical problems may also arise here, such as jeopardizing the user-translators' autonomy and obscuring Facebook's commercial purposes. To maximize the effectiveness of this motivational design in an ethical way, Facebook should take into careful consideration these influencing factors and ethical issues.

Keywords: translation crowdsourcing, motivational design, Facebook, gamification

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眾包翻譯之激勵性設計： 從遊戲化角度探討臉書社群翻譯

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眾包翻譯是 Web 2.0 世代中興起之線上參與式翻譯活動。今日無論營利或非營利機構皆已廣泛使用眾包翻譯，以擴展國際觸角並達成商業或人道主義目標。眾包翻譯順利推行的關鍵在於激勵志願譯者之翻譯動機並維持其熱忱。先前研究雖已針對此激勵動機做過詳細探討，然僅從譯者角度出發。為深入以往未觸及之觀點，本文以臉書社群翻譯為個案，並採用遊戲化概念作為分析架構，從理論層面對此社群翻譯之激勵性設計做一剖析。分析結果顯示，臉書社群翻譯應用程式除了含括與遊戲成分類似的組成要素之外，亦蘊含一個三層面的激勵性設計（亦即動機考量、簡單化措施與觸發物）以強化組成要素的功能。臉書翻譯應用程式的設計符合有成效之遊戲化體制的條件，因而就理論層面而言，可協助臉書滿足其譯者的多樣化動機，並使譯者持續投入。然而實際運作時，此激勵性設計的成效則可能受以下因素之影響而削弱：（1）臉書的漠視態度或不回應之作法、（2）翻譯相關情境資訊之不足、（3）回饋機制之能見度受限。此外，亦可能引發相關道德爭議，例如阻礙臉書譯者的自主性與掩飾臉書的商業目的。為能充分發揮此激勵性設計之成效，並避免衍生道德議題，臉書應審慎關注上述影響因素並體現道德關照。

關鍵詞：眾包翻譯、激勵性設計、臉書、遊戲化

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Introduction

The advent of Web 2.0 technologies not only has facilitated information sharing, interaction and cooperation among internet users, but also has enabled users to become personally involved, turning them from passive information receivers into active producers (i.e., user-producers) (Bruns, 2005). The emergence of such produsage has ushered in online crowdsourcing. Conceptualized by Howe (2006, 2008), the term *crowdsourcing* was initially defined as “the act of taking a job traditionally performed by a designated agent and outsourcing it to an undefined, generally large group of people in the form of an open call” (Howe, 2008, p. 16). Crowdsourcing has been growing at a phenomenal rate and has spread across such varied fields as photography, design, citizen science and journalism, public policy and translation (Hossain & Kauranen, 2015; Howe, 2006). Aside from various practical applications, the phenomenon of crowdsourcing has inspired scholarly research from a multitude of disciplines and viewpoints, which in turn has led to numerous definitions concerning crowdsourcing. To solve this problem of multiple definitions, Estellés-Arolas and González-Ladrón-de-Guevara (2012) suggest the following integrated definition based on the shared elements in forty extant definitions identified in a systematic review of the literature:¹

A type of participative online activity in which an individual, an institution, a non-profit organization, or a company proposes to a group of individuals of varying knowledge, heterogeneity, and number,

¹ Seeing that the concept and practice of crowdsourcing have been constantly evolving, Estellés-Arolas, Navarro-Giner and González-Ladrón-de-Guevara (2015) again conducted a detailed analysis of literature review on crowdsourcing to attest the validity of this integrated definition. The analysis reveals that the definition remains valid and need not be further revised.

via a flexible open call, the voluntary undertaking of a task. The undertaking of the task, of variable complexity and modularity, and in which the crowd should participate bringing their work, money, knowledge, and/or experience, always entails mutual benefit. The user will receive the satisfaction of a given type of need, be it economic, social recognition, self-esteem, or the development of individual skills, while the crowdsourcer will obtain and utilize to their advantage what the user has brought to the venture, whose form will depend on the type of activity undertaken. (p. 198)

Intended to be applicable equally well to any type of crowdsourcing, the above definition highlights three essential features: (1) an online practice, (2) voluntary participation of the crowd, and (3) the mutual benefit to both the crowd and the crowdsourcer. Among these three elements, the mutual benefit can be regarded as the driving force behind the other two because it can make the participants feel rewarded for their online voluntary contributions and motivate them to a certain extent. To put it another way, only when the crowd gets inspired and stays motivated can the crowdsourcing activity be successfully performed. The very important role of motivation is also emphasized in translation crowdsourcing initiatives. As indicated by Jiménez-Crespo (2017), translation crowdsourcing refers to “[c]ollaborative translation processes performed through dedicated web platforms that are initiated by companies or organizations and in which participants collaborate with motivations other than strictly monetary” (p. 25). Translation crowdsourcing usually relies on the availability of volunteer labor: translators do not normally receive financial remuneration. Therefore, motivating translators is of the utmost importance for translation crowdsourcing to remain effective.

Given that motivation is indispensable to translation crowdsourcing, some

studies have been carried out to explore volunteers' motivations to participate in translation initiatives launched by both non-profit and for-profit entities. The research on volunteer motivation in non-profit crowdsourcing centers on the translation projects of the following organizations: The Rosetta Foundation (O'Brien & Schäler, 2010), Wikipedia (McDonough-Dolmaya, 2012) and TED (Cámara de la Fuente, 2014; Olohan, 2013). Except for the study by Olohan (2013), which analyzes volunteer translators' blog entries, all the other research adopts the method of online survey to obtain the data on volunteer motivation. These existing studies share similar findings: the initiating organization's mission tends to outweigh the other motivational factors, which include gaining professional translation experience and improving translation skills, feeling intellectually stimulated, effecting social change, participating in communities and enjoying free time.

Concerning previous studies on the motivation of voluntary participation in for-profit translation initiatives, they revolve around Facebook community translation (Dombek, 2014; Mesipuu, 2012). Mesipuu (2012) investigates the motivations of Estonian user-translators of Facebook by distributing surveys to them, and Dombek (2014) explores those of Polish user-translators of Facebook through a mixed-methods approach that combines netnography and online surveys. The motivations pinpointed in the two studies include the following: (1) fulfilling a need to feel competent, autonomous and related, (2) achieving their expectations of personal and social benefits, (3) experiencing self-efficacy, reciprocity, commitment and reputation, (4) having fun and enjoying translation as a rewarding activity, and (5) improving translation skills and the poor quality of the existing content. These motivations are identified by drawing insights from self-determination theory (Deci & Ryan, 2000, 2008), the functional approach to volunteer motivation (Clary et al., 1998), the motivation to collaborate online (Kollock, 1999) and gamification (Zichermann

& Cunningham, 2011). As a commercially-oriented entity, Facebook does not advocate for any humanitarian causes or missions; therefore, the motivations of its volunteer translators are comparatively more personal and diversified.

All of the afore-reviewed research mainly delves into the motivational aspect from the perspective of volunteer translators. Almost no attention has been paid to the examination of the extent to which current translation initiatives are arranged to trigger, satisfy and maintain volunteer motivation in an effective way. Given the ever-increasing presence of translation crowdsourcing practices and their significant role in disseminating information globally, this paper will address the research gap and provide complimentary views of volunteer motivation by exploring the motivational design of Facebook community translation. In other words, a theoretical analysis will be made to probe (1) the motivational considerations of Facebook community translation, and (2) the corresponding strategies used to reinforce the motivational considerations and activate the already motivated user-translators as expected.

Facebook Community Translation as a Case Study

Facebook was established in 2005 by Mark Zuckerberg and his roommates. It released the translation app in 2007 and invited its users to volunteer to translate its English interface, and Facebook's user interface has currently been translated into more than 130 languages. The primary motives behind the adoption of such translation crowdsourcing are threefold: speed, quality and reach (DePalma & Kelly, 2011, p. 386). Through its massive user base, Facebook finds that the turn-around time of its localized versions can be dramatically reduced and that the translation quality can be enhanced because its users possess the required linguistic skills and expert knowledge

of digital genres (especially social media). Subsequently, Facebook can reach a global audience and the international market by rendering itself multilingual. Cost saving, however, seems not to be the main concern of Facebook, whose investment in developing and maintaining the translation platform can be more costly (DePalma & Kelly, 2011, p. 388; Desilets & Van de Meer, 2011, p. 31).

The reasons for choosing Facebook community translation as a case study are twofold. For one thing, Facebook's translation initiative is regarded as the most visible example of translation crowdsourcing owing to its purposefully designed translation app and its influence on other crowdsourcing initiatives in the information technology industry (Jiménez-Crespo, 2017, p. 53; O'Hagan, 2011, p. 14). For another, commercially oriented entities seem to face more challenges and evoke more controversy with regard to the issue of translation motivation. Volunteers translating for a non-profit organization usually identify with and are inspired by the organization's mission or humanitarian cause, as indicated in previous research. Most translators remain highly motivated, and ethical questions are rarely raised even though translation work is not monetarily rewarded. However, the translation projects launched by for-profit corporations are primarily aimed at achieving certain commercial interests—even though their user-translators may not be directly aware of such an aim, especially when they provide free services to their users like Facebook. Without valuable causes to stimulate volunteer translators, it is comparatively difficult for profit-oriented entities to mobilize volunteer translators efficaciously, and thus translation initiatives of these entities merit further research. Moreover, as mentioned earlier, Facebook community translation was initiated on account of participatory and linguistic concerns rather than cost reduction. Even so, the acceleration of Facebook's rapid internationalization and the increase of revenue still far outweigh the users' own benefits in terms of translation purposes. Under such circumstances, it is worth investigating if the tactics

and methods used in Facebook's translation project to persuade the users to contribute voluntarily are clearly ethical, or if they, to some degree, compromise some positive values (such as autonomy and transparency) and lead to some unethical practices.

Using Gamification as the Theoretical Framework

The notion of gamification will be used as the theoretical framework to investigate systematically the motivational design at issue. First, Facebook's translation project is basically a gamified system with some game-like elements, such as leaderboards, rewards and points. As indicated by Dombek (2014), "the analysis of the role of the components of the *Translations* application does enable a comparison between Facebook community translation and a game-like experience" (p. 256). Second, gamification as defined by Deterding, Dixon, Khaled and Nacke (2011) is "the use of game design elements in non-game contexts" (p. 9) to make non-game products or activities more entertaining, thus increasing user motivation and persuading users to participate, collaborate and interact in non-game contexts. Insights related to the motivational aspects of gamification can enable a detailed and systematic analysis of the motivational design of Facebook's translation initiative. In the following sections, the primary concepts of gamification will be introduced.

Main Components of Gamification

According to Zichermann and Cunningham (2011), gamification comprises three main components: game mechanics, game dynamics and game aesthetics. Game mechanics, which constitute the basic building blocks of a game, may include points, levels, leaderboards, virtual spaces, challenges and gifts. They can be used individually or collectively to provide users with

a motivational game experience. Aiming to promote deep engagement and productive interaction, game mechanics can usually facilitate learning (Edmonds, 2011). For example, users can develop new knowledge and acquire teamwork skills through exchanging opinions with others in the virtual space provided and collaborating together to combat the challenges embedded in a given gamified system. Game dynamics refer to the interactions between users and game mechanics as well as the results of such interactions. Thus, considering the mechanics adopted in a game, game dynamics may include rewards (e.g., earning points or badges), achievements (e.g., accomplishing something difficult and working toward goals), self-expression (e.g., having opportunities to express autonomy and creativity), status (e.g., levelling-up), competition (e.g., being added to the leaderboard) and altruism (e.g., gift-giving) (Suh, Wagner, & Liu, 2018). The combined results of game mechanics and dynamics can elicit emotions from users of gamified applications. These evoked emotions are viewed as game aesthetics and center on the feeling of fun (Hunicke, LeBlanc, & Zubek, 2004). Lazzaro (2008) further pinpoints four types of fun experienced by game players: easy fun (i.e., satisfaction from exercising autonomy or curiosity through exploration and creativity), hard fun (i.e., excitement from conquering challenges and gaining mastery), serious fun (i.e., fun from doing something that matters and is meaningful) and people fun (i.e., pleasure from social connections, collaboration and competition).

Apart from the above three game components, a gamified system also needs to create a social engagement loop to entice users to continue playing. Specifically, aesthetic emotions (i.e., different types of fun) should be used to enable users to respond to social calls to action (e.g., to help and to share). This approach leads to users' re-engagement in some tasks or missions. Then visible feedback or awards can be adopted to elicit users' aesthetic motivation again to develop a continuous engagement loop (Zichermann & Cunningham, 2011, pp.

67-68).

The main goal of gamification, as argued by Wu (2011), is to motivate users and drive their behavior toward desired and predictable results; therefore, it is essential to understand how humans behave in order to design strategically a gamified system that can persuade users to become involved and to take action. Accordingly, Wu adopts the experimental psychologist Fogg's (2009) behavior model for persuasive design as the psychological principles that explain how gamification components can be effectively organized. In Fogg's approach, three persuasive factors that lead to behavior change are identified: motivation, ability and triggers. It should be mentioned that the motivational aspect has already been deeply discussed in the field of gamification; instead of adopting Fogg's concept of motivation, this paper will draw insights from gamification research due to direct relevance. For the activity and trigger factors, both Fogg's and Wu's explanations will be reviewed.

Gamification User Types and Motivations

A better understanding of the types of users that a gamified system intends to engage can shed light on what can motivate these users and what experiences they are likely to interpret as fun. The users can then be stimulated and behave as expected. Therefore, Marczewski (2015, pp. 65-80) identifies four intrinsic and two extrinsic types of users for gamification, as shown in Table 1.²

The four intrinsic types are free spirits, achievers, socializers and philanthropists. Enjoying freedom and agency, free spirits are motivated by autonomy and entertained by easy fun. They like to feel that they have the

² The four intrinsic motivations proposed by Marczewski (2015) are drawn from Deci, Koestner and Ryan's (1999) self-determination theory and Pink's (2011) motivation theory. The former proposes three types of intrinsic motivators: autonomy, competency and relatedness, and the latter discusses autonomy, mastery and purpose.

Table 1

Gamification User Types, Motivations and Fun

User types	Motivations	Fun
1. free spirits	autonomy	easy fun
2. achievers	mastery	hard fun
3. socializers	relatedness	people fun
4. philanthropists	purpose	serious fun
5. players	reward	x
6. disruptors	change	x

Note. Compiled by the author

freedom to act or express themselves without any external control. Achievers, who want to pursue personal achievement and excel at tasks, are inspired by mastery (i.e., the process of mastering something and increasing their skills to meet challenges) and are entertained by hard fun. Socializers are fond of building up social connections and maintaining interactions with others; they are highly driven by the factor of relatedness and are delighted by people fun. Gratified by helping others, by answering questions or guiding them, philanthropists are motivated by a sense of purpose (such as altruism) and delight in serious fun. As the two extrinsic user types, players and disruptors are not stimulated by intrinsic motivators but rather by external factors. Basically, players focus purely on outside rewards instead of what is gained from the participation process, while disruptors enjoy changing the system by either manipulating it or affecting other users. A good gamified system usually prevents disruptors from participating unless it can capitalize on their creativity (Marczewski, 2015, pp. 65-80).

By increasing users' intrinsic motivating drives, the effectiveness of a gamified system can be enhanced because intrinsically motivated users are

likely to become deeply engaged in the system and maintain a long-lasting relationship with it. External rewards still carry some value because they function to reinforce and support these users' intrinsic motivations. Note that users do not constantly remain a single type. What motivates them and what they perceive as fun can change throughout the time they use the system. Additionally, at any given time, any individual user type may simultaneously exhibit features characteristic of the other user types (Marczewski, 2015, p. 65).

Users' Ability and Effective Triggers

Apart from considering user types and their corresponding motivations, a successful gamified system also needs to take users' ability into account and arrange effective triggers. Ability refers to the resources that users need to perform a behavior, such as the degree of concentration, physical or mental effort and the available time. Without these resources, users will not possess adequate ability to conduct the behavior (Fogg, 2009). However, even when they do have ability, they still sometimes do not carry out the desired task as expected. This type of failure may be the result of users' perceiving that they have insufficient ability to finish the task or that the task is too difficult to complete. Hence, to increase users' ability, two general approaches can be adopted: enhancing their real ability or increasing the task's perceived simplicity—for example, dividing a complex task into smaller and simpler sub-tasks or providing guides to show how the task is done and how simple it is (Wu, 2011).

Nevertheless, high motivation and ability do not necessarily guarantee the performance of a desired behavior without a proper trigger. As a stimulator that drives the expected behavior, a trigger is something that prompts or tells users to perform a target behavior. Fogg (2009) classifies triggers as sparks, facilitators and signals. Sparks can help stimulate those people who have the

ability to do a task but are not already motivated to do it. Advertising messages are an example of spark triggers. These messages attempt to persuade customers to buy something which they are not sufficiently motivated to purchase for the time being. Seeking to simplify a task, facilitators can assist those who have high motivation but lack the ability to complete the task at issue. For instance, when setting up a new computer, the easy-to-follow instructions can make the whole process easier. Signals serve as reminders for people who have both the motivation and the ability to act. A simple example of signals is a post-it note or a text message notification. Wu (2011) further indicates that the effectiveness of triggers also relates to user types. For example, an appropriate trigger for socializers may be to highlight certain social trends, while triggers that involve an elevation in social status or an increase in reputation can be relevant to achievers, who are usually stimulated by status.

An Effective Gamified System

Based on the above review of gamification, theoretically an effective and compelling gamified system (as illustrated in Figure 1) must contain both game components and motivational design. The game components should be structured based on the motivational needs of the target users. Moreover, the users' ability and proper triggers should also be considered because they can help strengthen user motivation and impel users to real action. It is essential that the game components be arranged to perform the function of task simplification and serve as required triggers; alternatively, they should be complemented with devices that fulfill those roles.

In the next section, this paper will use the gamification structure demonstrated in Figure 1 to analyze theoretically the degree to which the design of Facebook's translation project can effectively motivate its user-translators and keep them engaged.

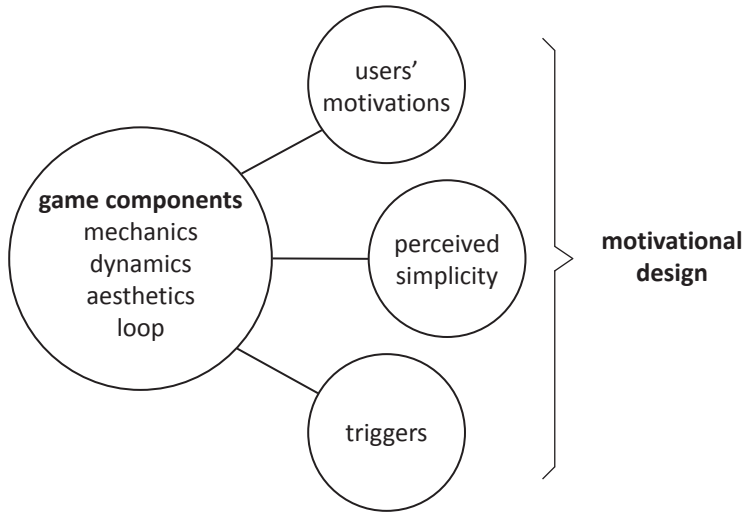


Fig. 1 An effective gamified system (Source: Compiled by the author)

Motivational Design in Facebook Community Translation

Facebook community translation is carried out through the Translate Facebook app (a built-in translation application), which contains the translation pane as the main interface as well as the following supporting elements: (1) the translator community, (2) leaderboards, awards and contribution points, (3) impact, (4) the function of inviting friends to help with translations, (5) useful translation links, including the translation app guide, style guide, glossary and frequently asked questions (FAQ), (6) the translation app feedback, and (7) the Translate Facebook app terms of service.³ The Translate Facebook app was not initially designed as a gamified system; therefore, only some of its constituent elements can be categorized as game mechanics, and others are more like

³ The Translate Facebook app is constantly updated or modified. This paper focuses on the version in use in 2017.

simplification devices or triggers, as shown in Table 2.

Table 2

Constituent Elements of the Translate Facebook App

Constituent elements as game mechanics	Other constituent elements
1. translation activity mechanisms	1. simplification devices
(1) translation pane	(1) translation app guide
(2) translator community	(2) style guide
2. feedback mechanisms	(3) glossary
(1) leaderboards	(4) FAQ
(2) awards	(5) translation app feedback
(3) contribution points	2. triggers
3. loop mechanism: inviting friends to help with translations	(1) translation app guide
	(2) Translate Facebook app terms of services
	(3) the impact section

Note. Compiled by the author

Translation Activity Mechanisms

The translation pane and translator community are two features directly related to the translation activity itself. The translation pane shows the original content that needs to be translated as an extensive list of randomly arranged short strings or segments, with accompanying contextual messages and existing glossary terms (if any) for reference. The user-translators can either provide their own translations or vote on translation proposals submitted by their peers. In its current form, the translation pane displays a limited number of translation variations for the user-translators to vote on; however, all the translation variations can be viewed by clicking the expansion button. The user-translators can either approve a proposed translation by clicking a check icon or

report a translation problem by flagging it. After flagging a translation variation, a dialog box opens containing the following options: “wrong style or wording,” “grammar or spelling errors,” “wrong meaning” and “abusive or offensive.” During the translation process, the user-translators can also join the translator community to discuss translation-related issues and post replies to translation questions and topics raised by other members. This translator community is fostered and promoted by Facebook to facilitate the translation project. Every translator involved in the community can join translation discussions.

The dynamics and aesthetics associated with both the translation pane and the translator community are delineated in Figure 2.

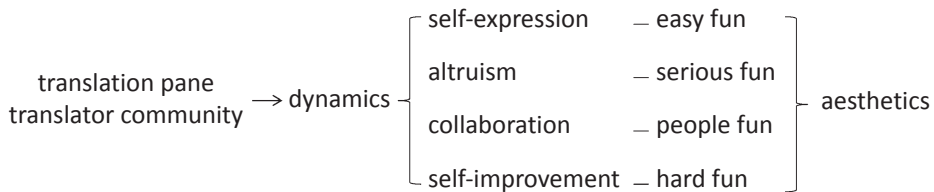


Fig. 2 Associated dynamics and aesthetics (Source: Compiled by the author)

First, the user-translators can freely choose either translating or voting and decide what they want to translate. They can also join the translator community and participate in translation discussions of their own accord. In this way, the user-translators are granted some freedom to enjoy self-expression through translating, voting and discussing; therefore, they can easily enjoy themselves. The dynamics of self-expression together with the enjoyment of easy fun satisfy the motivational need of autonomy and stimulate the free-spirited user-translators.

Second, the translation pane and community provide virtual spaces for altruistic people to offer translation help and to enable those who do not

understand English to use Facebook in their own native languages. Such dynamics of altruism, which allow the user-translators to experience serious fun while performing meaningful tasks, can meet the motivational need for purpose and inspire the user-translators of the philanthropist type to engage in the translation task.

Third, the dynamics of collaboration emerge (1) when the user-translators share translation knowledge and best practices with other peers through the translation pane and community, and (2) when senior translators offer suggestions and guidance to novice translators and forge a voluntary leader-follower relationship. The dynamics of collaboration can appeal to the motivation of relatedness and effectively attract the socializer-type translators, who are naturally social and have diverse levels of translation knowledge, by offering the experience of people fun. Concomitant with the dynamics of collaboration are those of self-improvement. Through knowledge-sharing, help-seeking and opinion-exchanging, the user-translators' translation skills and abilities can be improved to some extent. Self-improvement in translation, which can lead to personal development and enhance self-efficacy in the translation field, appeals to those user-translators who seek to improve and hope to accomplish much (i.e., the user-translators of the achiever type) by satisfying their need for mastery as well as offering the enjoyment of hard fun.

It should be noted, however, that the actual attitude held by Facebook toward the online discussions within a given translation community may influence the user-translators' autonomy and sense of relatedness. Take for instance Facebook's decision on the Chinese translation of the English phrase "see translation." From 2015 to 2016, around eleven Chinese user-translators expressed their disagreement with the decision made by Facebook to render "see translation" into Chinese as 翻譯年糕 (translation rice cake). Most of them indicated that if the Chinese translation was selected due to its reference

to Translation Konjac appearing in the Japanese anime Doraemon, it should be changed to 翻譯蒟蒻 (translation konjac), which was the official and conventional Chinese version used in Taiwan and thus was more acceptable. Some argued that 翻譯年糕 was not understandable, and not everyone in Taiwan could realize that such a translation was drawn from Doraemon. Others even claimed that 翻譯年糕 would be a mistranslation.

Despite all these opposing opinions, Facebook insisted on continuing to use 翻譯年糕 on its Chinese webpage version with some inadequate explanations summarized as follows. First, the Chinese term 翻譯年糕 did allude to Translation Konjac in Doraemon. Because of this, those users who found this Chinese term intriguing might be attracted to use Facebook's in-line translation app. Second, 翻譯年糕 was also adopted elsewhere, so Facebook was not the only one to use it. Third, even though some users may not have understood the term initially, they would smile knowingly after getting the point. Fourth, the Chinese version of Facebook was aimed at providing a website closer to the life and culture of Taiwanese users or to introduce some interesting topics.

As indicated earlier, one of Facebook's motives in adopting translation crowdsourcing is to rely on its massive following to produce the multilingual versions in tune with the linguistic and genre conventions or preferences of actual users. The ignorance of the Chinese user-translators' comments on 翻譯年糕 not only makes Facebook's translation initiative become suspect but also jeopardizes the user-translators' autonomy and democracy because their empowered bottom-up efforts are diminished or suppressed by Facebook's top-down control. Under this circumstance, the user-translators may somehow feel deflated, with their motivation being reduced to some extent.

On the other hand, if Facebook is insufficiently involved in the community discussions, the user-translators may also feel discouraged and

abandoned. In her study on Polish Facebook translators, Dombek (2014) points out that the user-translators surveyed expressed their discontent with Facebook's disinterest in the translators' discussions and lack of response even when constructive suggestions from Facebook were needed. Some considered that the direct interaction from those managing the translation project would be sincere encouragement for them. It is clear that without sufficient engagement from Facebook, the user-translators may feel isolated, and in turn their need for relatedness cannot be satisfactorily met.

The translation pane has two additional dynamics: challenge and competition. Even though Facebook's translation task is conducted at the segmental level rather than at the textual level, the task still challenges the user-translators because a majority of the users are non-professional translators. The translation challenge, similar to a problem-solving task, meets the user-translators' need for competence by serving as a yardstick against which they can evaluate their own performances. While trying to conduct difficult tasks, the user-translators also compete with one another because several translation proposals are allowed to submit for the same source segment, and the proposal with the highest votes will be the final translation candidate. Competition primarily fulfills the user-translators' desire for achievement and leadership. Based on the items mentioned above, the dynamics of challenge and competition increase the motivational factor of mastery and stimulate those user-translators who are competitive and seek competence (i.e., achievers) by offering them opportunities to enjoy hard fun.

The motivations and user types that the aforementioned dynamics and aesthetics can satisfy are summarized in Table 3. Obviously, the design of the translation pane and community can satisfy the needs of all types of intrinsically motivated translators and achieve practical requirements. In actual practice, Facebook welcomes all its users to participate in the translation

initiative rather than targeting a specific group of users; consequently, its user-translators may display the traits of all the user types listed in Table 3. Such diversity and changeability of the user-translators also resonate with the results of existing studies on the motivations of Facebook's user-translators (Dombek, 2014; Mesipuu, 2012), which reveal a wide range of motivational factors. Moreover, in reality any single translator's user type may be hybrid and may not remain constant all the time. Being designed to cater to all intrinsic types, Facebook's translation pane and translator community would presumably meet various motivational needs in real world practice if Facebook can well balance its organizational control and user-translators' freedom.

Table 3

Corresponding Motivations and User Types

Mechanics	Dynamics	Aesthetics	Intrinsic motivations	User types
translation pane	self-expression	easy fun	autonomy	free spirits
translator	altruism	serious fun	purpose	philanthropists
community	collaboration	people fun	relatedness	socializers
	self-improvement	hard fun	mastery	achievers
translation pane	challenge competition	hard fun	mastery	achievers

Note. Compiled by the author

Of course, it is also likely that Facebook's translation project will attract some disruptors (who usually do something damaging) in addition to the intrinsically motivated user-translators. The voting part of the translation pane asks the user-translators to report abusive or offensive actions by flagging a translation proposal, which may to some degree reduce the damage caused by disruptors.

The translation pane also contains the following features to make the translation task appear less complicated: it presents segments as the translation units and provides contextual messages and glossary matches. Rather than using a whole text as the translation unit, the translation pane splits the translation task into segments or short strings. In this way, a difficult translation task can be transformed into smaller and more manageable parts, increasing the perceived simplicity of the task. The user-translators (especially those who think their ability is insufficient) may find that this approach makes the translation task less demanding; consequently, they may be more willing to get involved. The contextual messages and glossary matches can provide some guidelines regarding how to translate an original segment in an appropriate and consistent way to fit the context in which the translated segment will be used. Ideally, these features can reduce the mental effort the user-translators must make during the translation process and may make the translation task appear simpler, so they also perform the role of facilitator triggers. Of course, in an actual setting, not all user-translators will experience the simplification effect equally. For example, some user-translators may not notice the contextual messages and glossary; for them, the effect does not exist. Moreover, advanced user-translators may not find the contextual messages and glossary information comprehensive enough; therefore, they will derive little benefit. In Dombek's (2014) study on the impact of Facebook's translation crowdsourcing environment on motivation, some Polish user-translators also indicated this problem of insufficient contextual information during the translating process.

Feedback and Loop Mechanisms

After completing some translation work, Facebook's user-translators receive feedback through the leaderboards, awards or contribution points. The leaderboards spotlight the top translators for the current week, month

and since the translation project began. The numbers of translations and votes contributed by the translators are also shown on the leaderboards. The leaderboard calculations are based on the number of words submitted that were approved, with translations weighing more heavily than votes. The award system, which was introduced to complement the leaderboards, contains awards related to the following three categories: voting participation, words published and translations published. Issued daily, each award category encompasses several levels that vary in terms of the frequency and accuracy of the translations submitted by the user-translators and the votes they cast. In addition to the leaderboards and awards, the user-translators can gain some measure of their performances through the mechanism of contribution points, which reflect the numbers of translations and votes a user-translator has produced.

All three feedback mechanisms share the dynamics of reward and achievement as well as the aesthetic emotion of hard fun. These mechanisms represent different forms of reward. Leaderboards, which link to the personal Facebook profiles of the top-ranking user-translators, are used to praise and recognize top user-translators' performances in public by comparing them with those of other translators. Facebook's various awards are visual representations of what the user-translators have achieved, and they are granted to the user-translators to encourage them and act as a goal-setting device, challenging them to attain a higher goal. Implicitly giving positive feedback on the user-translators' behavior, the contribution points are a numeric form of reward that provides the user-translators with concrete scores concerning their translating and voting performances. All the feedback mechanisms are external rewards and are particularly alluring for the user-translators of the player type, who are normally inspired by external motivations and may enjoy the hard fun brought by outside benefits. Also emerging from the three feedback

mechanisms are the dynamics of achievement. On one hand, these types of feedback can act as status symbols and meet the user-translators' needs for competence and leadership. On the other hand, they can be used as reputation indicators that tend to increase the user-translators' self-efficacy, encouraging good performances and motivating them to reach a goal. Accordingly, these feedback mechanisms and the associated emotion of hard fun also fulfill the motivation of mastery held by the user-translators of the achiever type.

In contrast to the other two types of feedback, Facebook's leaderboards foster the dynamics of competition because they enable the user-translators to juxtapose themselves with other peers and evaluate themselves, revealing their positions in relation to their peers. The dynamics of competition reinforce the other two dynamics emerging from the leaderboards and effectively entice the achievers.

The feedback mechanisms complement the translation activity mechanisms in terms of the motivational considerations. The translation activity mechanisms mainly cater to intrinsically motivated translators while the feedback mechanisms, as outside rewards, help to encourage externally motivated translators. As previously mentioned, Facebook's user-translators may be hybrid in terms of user types, and their types may also be in a constant state of change. Even though the user-translators who participate purely to win (i.e., the pure player-type translators) may be comparatively very few due to the free labor demanded by Facebook's translation project, it is highly possible that the trait exhibited by the player type (i.e., the seeking of extrinsic rewards) will appear in the intrinsically motivated user-translators, especially the achiever type. In this case, the feedback mechanisms strengthen the effect of internal motivations activated by the design of the translation pane and community.

Nevertheless, the accessibility of the above feedback mechanisms may influence their effect in actual practice. All the three types of feedback

are merely visible within the Translate Facebook app, and the awards or contribution points are even exclusively accessible to individual user-translators themselves. In this case, the user-translators' needs for recognition and acknowledgment by a wider audience cannot be satisfactorily fulfilled. This impact of restricted visibility has been pinpointed in Mesipuu's (2012) research on the motivations of Facebook's Estonian user-translators, where Mesipuu (2012) indicates that "although none of the people who participated in the survey had translated or voted just to get an award, they felt such titles might have been worthwhile if they could have been displayed on one's profile page" (p. 50).

When the translation activity and feedback mechanisms work together, a social engagement loop, another essential mechanism for effective gamification, is brought into existence, as demonstrated in Figure 3.

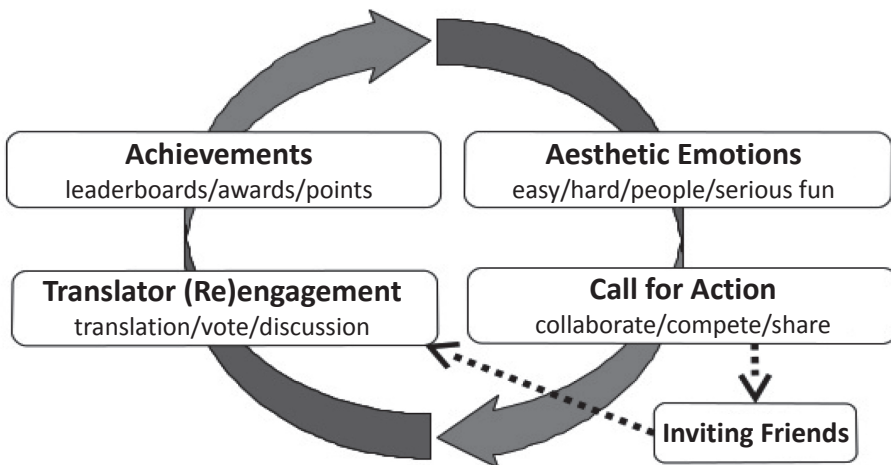


Fig. 3 The social engagement loop of Facebook community translation (Source: Compiled by the author)

Based on the evoked aesthetic emotions, the user-translators can be motivated to continue doing the translation task, collaborate with others and

even share the information of the translation project with their Facebook friends through the mechanism of inviting friends to help with translations. Then, volunteer translators may re-engage in the translation project and earn some external rewards, which, in turn, can elicit positive motivations again. The mechanism of inviting friends shown in Figure 3 can lead to the dynamics of collaboration and provide the user-translators with a chance to further consolidate social bonds with their friends by sharing information about Facebook's translation project and inviting them to join the effort. By enabling the user-translators of the socializer type to enjoy people fun, the loop mechanism can meet the motivation of relatedness.

Simplification Devices

As indicated in Table 2, the following five constituent elements can be regarded as playing the role of simplification devices: the Facebook app guide, style guide, glossary, FAQ and translation app feedback. The Facebook app guide provides Facebook's user-translators with general rules for carrying out the whole translation project. Acting as a macro-level framework, the guide offers information related to the main features of the Translate Facebook app and how to proceed with this app (see Table 4). Facebook's user-translators can have an overall understanding of the design and operation of the app. In principle, the translation task will not seem too overwhelming to them.

More specific details concerning the translation style are offered in the style guide. Facebook provides the style guide in 72 languages, offering information related to the overall approach, basic translation styles (see Table 5) and language-specific translation instructions. The style guide, together with the glossary list (i.e., a list of core Facebook terminology compiled by professional translators hired by Facebook), can enhance the perceived simplicity. The user-translators have a blueprint to follow and understand what their translations

should look like. The translation task may appear less demanding than it might otherwise.

Table 4

Facebook App Guide

Main areas	Translating and voting with the app
1. translation pane	1. translating with relevant contexts and glossary entries
2. useful translation links (the style guide, glossary and FAQ)	2. translation issues concerning tokens, variations and attributes
3. translation app feedback	3. how to vote
4. leaderboards, awards and contribution points	
5. translator community	

Note. Compiled by the author

Table 5

Overall Approach and Basic Translation Styles

Overall approach	Basic translation styles
1. content principles: keep it simple; get to the point clearly	1. be concise: use as few words as possible while remaining clear; replace jargon with everyday terms
2. Facebook voice: be simple, straightforward, natural, neutral and approachable	2. consider your audience
	3. make it readable

Note. Compiled by the author

Complementary to the Facebook app guide and style guide are the FAQ and translation app feedback. By clicking these latter two parts, the user-translators can be directed to Facebook's Help Centre, where they can search all the information covered by the former two guides through lists of frequently asked questions. Facebook's user-translators can choose either to scan through the two guides or to search for the information specific to particular topics

through the FAQ and translation app feedback.

Because the user-translators are not required to read through the information covered by all these constituent elements before they begin translating, the perceived simplicity of the translation task may be enhanced either before or during the translation process.

Triggers

Within the Translate Facebook app, the following three elements can serve as triggers: the translation app guide, the Translate Facebook app terms of service and the impact section. Not all the contents covered by the translation app guide act as triggers. The relevant parts are those related to various types of feedback and the translator community. The former can motivate both the player- and achiever-type translators by enabling them to know what they can obtain by making their contributions to the translation project. The latter can stimulate the socializer-type translators by associating the translation project to corresponding translator communities.

Similar to the translation app guide, the Translate Facebook app terms of service do not act as triggers as a whole; only the parts regarding the user-translators' participation function as triggers. Facebook makes it clear in the terms of service that participating user-translators "may provide as much or as little input into the Project" (Terms Applicable to Translate Facebook, 2009) as they wish and are free to decide when to stop making contribution. This statement may appeal to the free-spirit-type translators, who enjoy freedom and autonomy. Moreover, Facebook also attempts to elicit altruistic responses from its user-translators and stimulates them to help the Facebook user community of their chosen language by including the following information in the terms: "[y]ou understand that your participation in the Project is for the benefit of the Facebook user community as it will allow users whose participation is

currently limited by language to more fully participate” (Terms Applicable to Translate Facebook, 2009). Clearly, such a message is intended to attract the philanthropist-type translators to join the translation initiative. However, this community argument may blur the actual commercial purposes of for-profit crowdsourcing initiatives and breach the ethics of transparency. As argued by McDonough-Dolmaya (2011), Facebook’s “community-centered focus is a device used to generate interest, commitment and involvement with a brand or company, which ultimately helps attract more users and thereby generate more revenue for the company” (pp. 102-103). Due to the fact that Facebook provides free services to its users, they may not perceive clearly that Facebook is indeed making advertising revenue by reaching more users.

The last element that functions as a trigger is the section of impact, where Facebook informs its user-translators of how many of their Facebook friends they can help by translating Facebook. This section relates the translation project to the user-translators’ social connections and possible achievement, and it makes an appeal to their altruistic emotions; therefore, it can be an effective trigger for socializers, achievers and philanthropists. Like the trigger related to the Facebook user community, the impact section as a trigger may also lead to the breach of transparency.

All the aforementioned elements can function as both spark and signal triggers. When the user-translators pay attention to these elements before embarking on the translation task and joining the translator community, the elements can act as spark triggers to motivate them. However, if the user-translators consult or view the messages covered in these elements during the translation process and after joining the translator community, then the elements can serve as signal triggers because the user-translators may have already been motivated by translating and voting through the translation pane or by interacting with peers in the translator community.

Note that the actual effect of the simplification devices and triggers differs depending upon (1) the user-translators' awareness as well as their translation ability and motivations and (2) Facebook's responses. The simplification and trigger functions cannot perform effectively for those user-translators who are unaware of these elements. Even for those who are aware, the effects can vary. For example, the user-translators with lower levels of ability may find the simplification devices helpful because the whole translating task may appear less complex while those with higher levels may not rely too much on the simplification devices and thus may regard them as less beneficial. Likewise, the spark triggers may exert substantial effect on the less motivated user-translators but not on the highly motivated ones.

The way Facebook responds to the user-translators' requests or questions usually influences whether the simplification devices (especially the translation app feedback device) will work. Quick and adequate responses from Facebook can intensify the simplification effect; otherwise, the effect may be greatly reduced. For example, in Dombek's (2014, pp. 160-185) netnographic study of Facebook Polish user-translators' challenges when translating through the Translate Facebook app, the lack of response, feedback or assistance from Facebook was pointed out by some user-translators as a factor discouraging them from making voluntary contributions. Even though the simplification devices and triggers may not be equally relevant to every user-translator in actual practice, their arrangement can to some degree assist in serving those who need such help and may motivate more user-translators to get involved.

Conclusion

Through a detailed analysis, the motivational design of Facebook community translation has been proved to meet the theoretical requirements

of an effective gamified system, as demonstrated in Figure 4. Within such a design, the essential mechanics of the translation project, coupled with relevant simplification devices and triggers, operate adequately to bring forth desired dynamics and aesthetic emotions and in turn fulfill the varied needs of Facebook's diverse volunteer translators. Despite being theoretically well-founded, Facebook, in its actual setting, still needs to take measures to improve its attitude toward the translation project, enhance the visibility of the feedback mechanisms, grant its user-translators more autonomy and make transparent its commercial purposes. Only by doing so can the beneficial potential of the motivational design be realized thoroughly in an ethical way.

This research can complement the previous studies on translation motivation in two aspects. First, the in-depth analysis of the motivational design at issue can not only explain what evokes those translation motivations as identified in the previous studies but also make clear how volunteer translators' various motivations are maintained, strengthened or diminished. Second, some ethical implications involved in evoking volunteer motivations have been addressed. These ethical issues are equally important to both volunteer translators and the initiators of for-profit translation projects because the former should not be exploited and the latter should avoid unethical practices in order to establish reciprocity.

Apart from providing complementary views, this paper also makes the following contributions: (1) enabling both academia and industry to understand better the significant impact of motivation on translation crowdsourcing, (2) assisting translation practitioners in realizing how a crowdsourcing initiative can or cannot fulfill their needs (either personal or social) and distinguishing between sincere and deceptive intentions of for-profit translations projects, (3) helping those who initiate volunteer translation projects to acquire further understanding of how to motivate their translators and keep them engaged

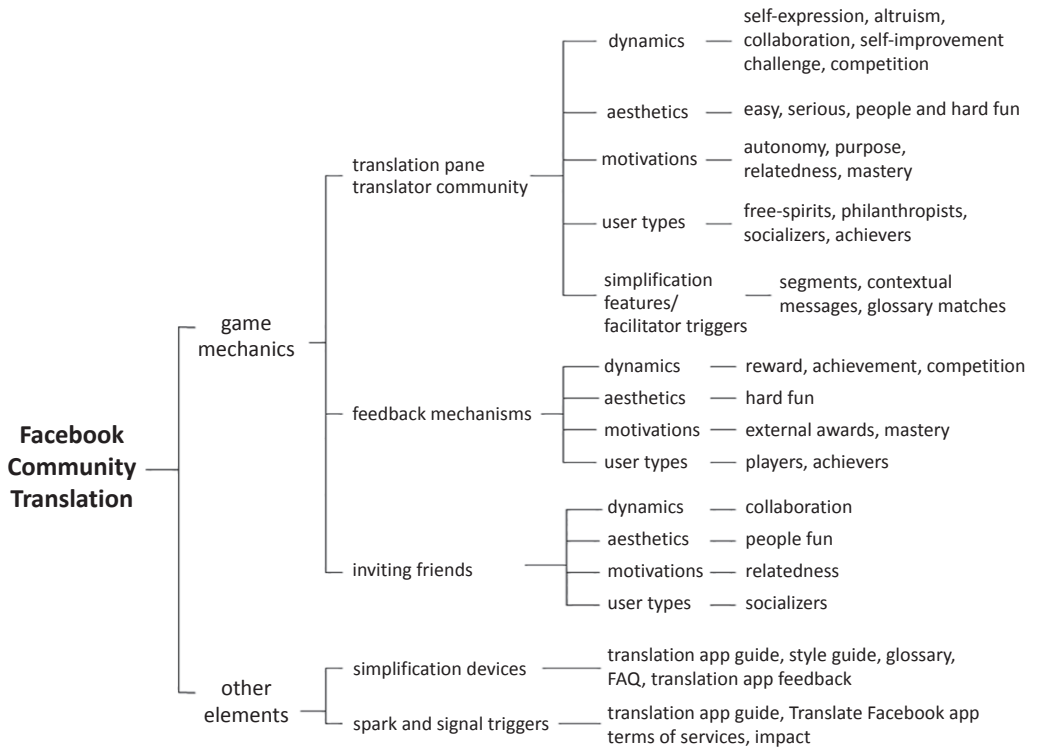


Fig. 4 The motivational design of Facebook community translation (Source: Compiled by the author)

as well as making them aware of potential ethical problems, and (4) offering a theoretical foundation for future empirical research on the motivational design at issue, for example the study examining the actual effect of the motivational potential of Facebook community translation through online surveys and/or interviews.

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